

Amendments to the Claims:

Please replace all prior claims versions and listings with the following:

Listing of Claims:

1. **(original)** A supported catalyst, comprising:
a solid support; and
a porous coating on the solid support, the porous coating having as a major constituent a material exhibiting catalytic activity, the material exhibiting catalytic activity including a transition-metal containing material, the porous coating having a binder for holding the coating together and adhering the coating to the support.
2. **(original)** The supported catalyst of claim 1, wherein the transition metal-containing material includes an oxide of a transition metal.
3. **(original)** The supported catalyst of claim 2, wherein the transition metal is selected from the group consisting of scandium, titanium, vanadium, chromium, manganese, iron, cobalt, nickel, copper, yttrium, zirconium, niobium, molybdenum, palladium, silver, tantalum, tungsten, bismuth, antimony, tin, zinc, cerium and lanthanum.
4. **(original)** The supported catalyst of claim 3, wherein the transition metal is selected from the group consisting of nickel, cobalt, iron, molybdenum, tungsten and chromium.
5. **(original)** The supported catalyst of claim 1, wherein the solid support is inert or catalytically active.
6. **(original)** The supported catalyst of claim 5, wherein the support is inert.

7. **(original)** The supported catalyst of claim 6, wherein the inert solid support is made of a material selected from the group consisting of a metal, glass, ceramic or glass-ceramic material.
8. **(original)** The supported catalyst of claim 7, wherein the inert solid support is comprised of alumina, titania or silica.
9. **(original)** The supported catalyst of claim 5, wherein the solid support is in the form of a bead, a pellet, a monolithic honeycomb, or a reticulated foam.
10. **(original)** The supported catalyst of claim 1, wherein the binder is a condensed silica-containing and/or alumina-containing compound.
11. **(original)** The supported catalyst of claim 1, wherein the binder includes an alkoxysilane.
12. **(original)** The supported catalyst of claim 8, wherein the alkoxysilane is tetraethylorthosilane.
13. **(original)** A bulk transition metal-containing material catalyst, comprising:
a porous solid mass having as a major constituent a transition metal oxide, the solid mass having a binder for holding the catalytically active material together in the solid mass.
14. **(previously presented)** The bulk catalyst of claim 13, wherein the transition metal oxide is selected from the group consisting of scandium, titanium, vanadium, chromium, manganese, iron, cobalt, nickel, copper, yttrium, zirconium, niobium, molybdenum, palladium, silver, lanthanum, tantalum, tungsten, bismuth, antimony, tin, zinc, cerium and lanthanum.
15. **(previously presented)** The bulk catalyst of claim 13, wherein the transition metal oxide is selected from the group consisting of nickel, cobalt, iron, molybdenum, tungsten and chromium.

16. **(original)** The bulk catalyst of claim 13, which is in the form of beads, pellets, or a monolithic honeycomb.

17. **(previously presented)** The bulk catalyst of claim 13, wherein the binder is a condensed silicon-containing and/or alumina-containing compound.

18. **(original)** The bulk catalyst of claim 13, wherein the binder includes an alkoxysilane.

19. **(previously presented)** The bulk catalyst of claim 18, wherein the alkoxysilane is tetraethylorthosilane.

20. - 37. **(canceled)**